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ANCIENT PORTRAITS OF MATHEMATICIANS

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SUMMARIES

Ancient portraits of mathematicians are very rare. Since portraiture of living persons on ancient coins was restricted to rulers and members of their families, there are no contemporary portraits of mathematicians on ancient coins. However, a posthumous portrait of Pythagoras, who died c. 497 B.C., is the first portrait of a man, as opposed to a god, on a coin. Portraits did not exist at the time of Pythagoras; thus this coin, minted c. 430 B.C., is an extremely early portrait of a mathematician.

Des portraits antiques de mathématiciens sont très rares. Puisque des portraits de personnes vivantes sur la monnaie de l'antiquité se limitent aux gouvernants et aux membres de leurs familles, il n'existe aucun portrait contemporain d'un mathématicien sur la monnaie antique. Mais, un portrait posthume de Pythagore, qui mourût vers 497 av. J.C., est le premier portrait d'un homme, au lieu d'un dieu, sur une pièce de monnaie. Des portraits n'existaient pas au temps de Pythagore, donc cette piece, frappée vers 430 av. J.C., est un portrait d'extrême antiquité d'un mathématicien.

Very few ancient portraits of mathematicians exist. An ancient Greek coin of c. 430 B.C. has a posthumous portrait of Pythagoras, but ancient coins probably do not display any portraits of contemporary mathematicians.

D. E. Smith [Smith 1923, 120] remarks of M. Terentius Varro (116-28 B.C.): "He is one of the few pre-Christian mathematicians of whom we have a contemporary portrait, appearing on a coin struck when he was proquaestor of Pompey" (49 B.C.). Unfortunately, the portrait (Fig. 1) is actually of the god Jupiter, and not of Varro [Sydenham 1952, coin number 1033]. Julius Caesar was the first living Roman to have his portrait on a coin, and that only in the year of his death, 44 B.C. [Sutherland 1974, 95]. Previously only gods, personifications such as Roma, and dead ancestors had been portrayed on Roman coins.

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FIG. 1. Roman Republican silver denarius struck under Pompey in 49 B.C. Obverse: Bust of Jupiter. Reverse: Sceptre upright, dolphin on left, eagle on right. Diameter: 18 mm. Courtesy of American Numismatic Society.

The confusion about the coin of Varro is easy to understand. A man named Varro was the moneyer, a state official responsible for the quantity and quality of the coinage, who placed his name on the portrait side behind the head of Jupiter, as all moneyers (there were three each year) before the time of Caesar placed their names on their coins [Sutherland 1974, 54]. It would be easy, but mistaken, to imagine that the name refers to the portrait. Furthermore, recent scholarly opinion is that the moneyer could not have been the famous Varro [Crawford 1975, 91, 463, 547]. In Imperial times the emperor's name replaced that of the moneyer, and coin portraiture is restricted to the emperor and members of his family with very few exceptions.

Coin portraits in the Greek and Persian world were also of gods, personifications, rulers and their family members. However, there is a remarkable portrait of Pythagoras, (Figs. 2 and 3), the mathematician and philosopher, on large silver tetra

FIG. 2. Silver tetradrachm of Abdera struck c. 430 B.C. Obverse: Griffin. Reverse: Head of Pythagoras. Diameter: 25 mm. Reprinted, by permission, from *Archaic and Classical Greek Coins* by Colin Kraay, Copyright 1969 by University of California Press (U.S. rights only)

drachms of the Greek city Abdera (in ancient Thrace, in northeastern Greece). These coins are attributed to c. 430 B.C., a relatively short period of time after his death c. 497 B.C. They purport to show the features of a famous man of an earlier age when portraits did not exist, and are the first coins portraying a man, as opposed to a god. The portrait, filling a small square, is surrounded by the letters of his name inside a larger square inscribed on the coin. He has a beard and wavy hair, both of moderate length, and a long straight nose. (The two coins illustrated show differences in the portraits because the dies for striking the coins were individually hand made, possibly even by different artists with differing ideas of how Pythagoras looked.) Pythagoras was regarded as a demigod by a

FIG. 3. The reverse of a silver tetradrachm of Abdera struck c. 430 B.C. with the head of Pythagoras. Diameter: 24 mm. Reprinted, by permission, from *Ancient Greek Coins* by G. K. Jenkins; Copyright 1972 by G. P. Putnam's Sons.

religious-philosophical cult, and it is probably in this role, rather than that of a mathematician or philosopher, that he is represented on the coinage. Furthermore, the magistrate responsible for the coinage was also named Pythagoras, and it is this coincidence that motivated the issuance of the unprecedented type (the coin is discussed in Kraay on page 155 and in Jenkins on page 98).

After the Roman conquest of the East, coining in silver and gold was the prerogative of the Romans with the exception of a very few cities, but many individual cities retained the right to coin in bronze. It is this "colonial" coinage on which there are standing and seated figures of Pythagoras and portraits of a few other Greeks who were not rulers, such as Homer, Hipparchus, Herodotus, Sappho, Anaxagoras, and Eucleides. But none of these depictions are contemporary, all being of Imperial times when the cities issuing the coins were recalling past glories.

There are literally thousands of types of colonial coins, and thousands more of Roman and pure Greek mintage, not all of which have been fully identified and attributed, but it seems there are not extant coin portraits of Euclid, Aristotle, Archi-

medes, or any other mathematician *qua* mathematician. Furthermore, the political and religious aspects of the coinage make it highly unlikely that any ancient coins were ever issued with a contemporary portrait of a mathematician.

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